

***FlyBy Math™* Alignment**
Academic Standards: Mathematics

Content Standard 2.0 Algebra

Students will describe, extend, analyze and create a wide variety of patterns and solve real-world problems using appropriate representations.

Learning Expectations

2.5 interpret graphs that depict real-world phenomena.

***FlyBy Math™* Activities**

--Interpret the slope of a line in the context of a distance-rate-time problem.

--Use tables, bar graphs, line graphs, a Cartesian coordinate system, and equations to model aircraft conflicts and predict outcomes.

2.6 model real-world phenomena using graphs.

--Use tables, bar graphs, line graphs, a Cartesian coordinate system, and equations to model aircraft conflicts and predict outcomes.

Content Standard 3.0 Geometry

The student will investigate, model, and apply geometric properties and relationships.

Learning Expectations

3.2 communicate position using spatial sense with two-dimensional coordinate systems;

***FlyBy Math™* Activities**

--Plot points on a schematic of a jet route, on a vertical line graph, and on a Cartesian coordinate system to describe the motion of two airplanes.

Content Standard 4.0 Measurement

Students will become familiar with the units and processes of measurement in order to use various tools, techniques, and formulas to determine and estimate measurements in problem solving.

Learning Expectations

4.1 apply appropriate techniques, tools, and formulas to determine measurements;

***FlyBy Math™* Activities**

--Calculate and measure the position and time of simulated aircraft. Represent that motion using tables, graphs, equations, and experimentation.

Content Standard 5.0 Data Analysis & Probability

Students will understand and apply basic statistical and probability concepts in order to organize and analyze data and to make predictions.

Learning Expectations

5.1 choose, construct, and analyze appropriate graphical representations for a data set including pie charts, histograms, stem and leaf plots, and scatterplots;

***FlyBy Math™* Activities**

--Choose among tables, bar graphs, line graphs, a Cartesian coordinate system, and equations to model aircraft conflicts and predict outcomes.